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CANADIAN FUNGI.

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The Fungi here enumerated were received from Prof. John Macoun, Botanist to the Geological and Natural History Survey of Canada, and and were mostly collected during the summer of 1884. The Collection, though small and consisting mostly of species already known, comprises some not heretofore recorded in this country.

UREDINEÆ.

PUCCINIA MESOMEGALA, B. & C.—On *Clintonia borealis*, Lake Ellen, Nipigon River, June.

PUCCINIA CONGREGATA, E. & H.—On *Mitella nuda*, islands in Lake Nipigon.

PUCCINIA ASTERIS, Duby, var. PURPURASCENS, C. & P.—On *Aster macrophyllus*, Lake Superior region.

PUCCINIA NARDOSMII, E. & E.—Sori numerous, hypophyllous, purplish brown, subconcentrically arranged in circular clusters about 4 mm. in diameter, soon naked. Spores rather variable in shape, elliptical to oblong and often more prominent on one side, scarcely constricted at the septum, 25—30 x 15—20 *u*, often narrowed above, epispore smooth, thickened at the apex with a distinct, subhyaline papilla, pedicels about as long as the spores, fragile and easily deciduous.

On leaves of *Nardosmius* (*Petasites*) *palmatus*, Red Rock, Lake Superior, June.

The mostly smaller spores with smooth epispore and the more decided, clustered mode of growth would seem to sufficiently distinguish this from *P. Compositarum*, Schlect.

UROMYCES OROBI, Winter.—On *Lathyrus ochroleucus*, Long Portage, Nipigon river.

TRIPHRAGMIUM CLAVELLOSUM, Berk.—On *Aralia nudicaulis*, Burnt Island, Nipigon river, July.

RŒSTELIA LACERATA, Tul.—On *Cratægus tomentosa*. Near Ottawa, August. Possibly these specimens are referable to *R. cornuta*, Tul. Some of them are certainly distinguishable with difficulty from that species.

ÆCIDIUM COMPOSITARUM, Mart.—On leaves of *Aster Lindleyanus*, Nipigon river, July. Another form (of this species?) on *Lactuca Canadensis* from the same locality has the æcidia densely clustered in patches ½ cm. in diameter.

ÆCIDIUM GROSSULARIÆ, DC.—Lake Ellen, Nipigon river, June.

ÆCIDIUM RANUNCULACEARUM, DC.—On *Anemone nemorosa*, Nipigon river, July. This is the form distributed in N. A. F. 1003 *a*.

ÆCIDIUM ALBUM, Clinton.—On *Vicia Americana*, Nipigon river, July.

ÆCIÆIUM CALADII, Schw.—On *Arisæma triphyllum*, Ottawa, June.

ÆCIDIUM VIOLÆ, Schum.—On *V. renifolia*, Ottawa, June.

COLEOSPORIUM MINIATUM (Pers.)—On *Rosa blanda*, Red Rock, Lake Superior, June.

MELAMPSORA SALICINA, Lev. (Uredo.)—On willow leaves, Lake Nipigon, July.

UREDO OBTUSA, Strauss.—On *Potentilla gracilis*, Moose Jaw, N. W. Terr., May.

UREDO GYROSA, Reb.—On leaves of *Rubus*.

UREDO AGRIMONIÆ, DC.—Lake Nipigon, July.

CÆOMA LUMINATUM, Schw.—On *Rubus triflorus*, Ottawa, June.

USTILAGO URCEOLORUM, Tul.—Fruit of *Carex siccata* and *C. canescens*, Lake Nipigon, June.

IMPERFECT FUNGI.

EXCIPULA CONGLUTINATA, E. & E. (in Bull. Wash. Coll. no. 1, p. 6.) Dead stems of *Ranunculus*, Cape Chudleigh. The specimens are in no way distinguishable from the original Mt. Paddo specimens.

EPHELIS BOREALIS, E. & E.—Stoma of a grayish buff color and of fine grumous texture, extending along and enveloping the leaf for about ½ cm., after the manner of *Epichloe typhina*, Fr. Spores masses not numerous (2—5 on a stroma), innate, causing convex swellings which are at first covered by the superficial layer of the stroma but are at length exposed with an imperfect margin, appearing somewhat like a flat *Peziza*. Spores acicular, nearly straight or often bent in the middle, hyaline or pale yellowish, nucleolate (?), ends subobtuse, 15—25 x ¾ *u*.

On leaves of living grasses, Nova Scotia, June, 1883. Possibly this may not prove sufficiently distinct from *E. Mexicana*, Fr., but that species is said to have a black stroma and infests the inflorescence of grasses.

LYCOPERDINEÆ.

LYCOPERDON ATROPURPUREUM, Vitt.—Ottawa.

SECOTIUM WARNERI, Pk.—Among rubbish in gardens, Ottawa.

MYCENASTRUM OREGONENSE, E. & E., Ottawa.

The following species of Lycoperdon apparently undescribed was

sent with a collection of lichens and mosses from Labrador, by Mr. L. M. Turner, to Mr. Everhart for determination.

LYCOPERDON TURNERI, E. & E.—Peridium obovate, 4—6 cm. in diameter, olive brown, rather firm, clothed with a coat of rather short subspinose-warts which finally fall off and leave the surface smooth. Sterile base distinct, about 1 cm. thick passing gradually into the rather dense mass, dirty gray (when cleared of spores) capillitium without any definite columella. Spores globose, yellowish-olive, echinate-verrucose, 4—5 *u* with a slight rudimentary pedicel. The peridium is contracted and subplicate below but not stipitate, and is finally irregularly ruptured above.

BOVISTA TABACINA, Sacc. Mich. II, p. 565.—Globose, rather large (4—5 cm.), nearly rootless. Peridium membranaceo-coriaceous, lead-colored, finally variously ruptured. Nucleus compact-lanose, elastic tobacco-colored, composed or rather rigid, many times dichotomously branched, dark brown (atrofuligineis) threads, paler above, the larger branches 10—12 *u* thick. Spores globose, minute, smooth, with a single nucleus, 3½—4 *u*, yellow-olive with a minute rudimentary pedicel. On the ground, Canada. Le Metayer.

We have not seen this species, and copy the description from Michelia.

SPHÆRIACEÆ.

PODOSPHÆRA KUNZEI, Cda.—On leaves of young seedling elms, Ottawa.

PLEOSPORA HERBARUM (Pers.)—Dead stems of *Papaver nudicaulis*, Cape Chudleigh. Sporidia 30—35 x 16—18 *u*.

PLEOSPORA HISPIDA, Niessl.—Dead stems of *Draba*, Digger's Island (Hudson strait.) Perithecia 200—300 *u* in diameter, fringed at base, with brown creeping threads and a few spreading hairs, ostiolum also surrounded with a fringe of brown, sparingly septate, spreading hairs 60—75 *u* long. Asci 80—100 x 20—25 *u*, contracted at base into a short pedicel. Sporidia oblong-elliptic, 5—7-septate and muriform, straw yellow at first, becoming dark brown, 20—26 x 10—13 *u*, mostly constricted about the middle. Agrees well with Niessl's description and with the specimens in Rab-Winter's Fungi 2857, except that the hairs are not as evenly distributed over the perithecia which, excepting the basal and apical fringe are nearly bald. On the same stems are smaller perithecia filled with stylospores oblong-cylindrical, 3-septate, 20 x 4 *u*.

SPHÆRELLA STELLARINEARUM, Karst.—On dead stems and leaves of *Stellaria longipes*, Cape Prince of Wales. Also on *Draba alpina*, Nottingham's Island, Hudson Strait. Sporidia 20—27 x 5—7 *u*.

RHYTISMA SALICINUM, Pers.—Leaves of *Salix herbacea*.

LOPHODERMIUM ARUNDINACEUM (Schrad.)—On *Elymus mollis*, Digger's Island, Hudson's Strait.

NUMMULARIA PEZIZOIDES, E. & E., Bull. Torr. Bot. Club, XI, p. 74. Will have to be abandoned, being in fact not specifically distinct from *N. repanda* (Fr.)